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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,815	01/31/2001	William T. Carpenter	P01426US2	8585

26271 7590 05/04/2004

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EXAMINER	
KRECK, JOHN J	

ART UNIT	PAPER NUMBER
3673	

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/773,815	CARPENTER, WILLIAM T.	
	Examiner	Art Unit	
	John Kreck	3673	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Independent claim 11 calls for a step of "calculating a moment of stability". The specification fails to disclose any equations or methods to perform such a calculating step. The specification also fails to disclose how the liquid would be captured and placed in predetermined locations. Would pumps be used? How many pumps would be required? How long would the process take? The specification also fails to disclose how much mass would be required to make an appreciable change in the axis of rotation. Absence of supporting disclosure would require undue experimentation for one skilled in the art to carry out the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chao (Anthropogenic impact on global geodynamics due to reservoir water impoundment) in view of White (Pole Shift: predictions and prophesies of the ultimate disaster); and Brown (Cataclysms of the Earth)

Chao teaches that impoundment of water in large reservoirs has changed the character of rotation of the Earth's axis, including shifting the pole (Introduction, third paragraph). Chao further teaches the steps of measuring the mass of the planet, determining the center of mass of the planet, and characterizing the axis of rotation of the planet.

Chao fails to explicitly disclose the steps of selecting a desired character of rotation; calculating a moment of stability; determining a position and mass of a compensating substance; and positioning the mass.

White teaches that a pole shift is "the ultimate disaster" and further teaches the desirability of preventing pole shift (see pages 81 and 181). The desirability of preventing pole shift is also taught by Brown (see "An Exhortation" page 152), who also teaches that the prevention is an "engineering problem" (see page 153)

In light of the combined teaching of Chao, White, and Brown, it would have been obvious to one of ordinary skill in the art at the time of the invention to have measured the mass of a planet, determined the center of mass, characterized the axis of rotation,

selected a desired character of rotation, calculated a moment of stability required to cause the desired character of rotation, determined a position of and mass of a compensating substance sufficient to effect the moment of stability, and positioned the mass in the position, as called for in claim 11, in order to correct the alterations to the axis of rotation characterized by Chao and to prevent "ultimate disaster".

With regards to claim 12, see page 3531, col. 2, it would have been further obvious to one of ordinary skill in the art at the time of the invention to have the position of the compensating substance in an underground cavity in order to correct the alterations to the axis of rotation characterized by Chao.

With regards to claim 13, Chao teaches the aboveground cavity (reservoir), thus it would have been further obvious to one of ordinary skill in the art at the time of the invention to have the position of the compensating substance in an aboveground cavity in order to correct the alterations to the axis of rotation characterized by Chao.

With regards to claim 14, Brown teaches the moving solid substance (ice) it would have been further obvious to one of ordinary skill in the art at the time of the invention to have the compensating substance a solid, because solid substances are easier to control, in order to correct the alterations to the axis of rotation characterized by Chao.

With regards to claim 15-17, Chao teaches the liquid, thus it would have been further obvious to one of ordinary skill in the art at the time of the invention to have the compensating substance a liquid in order to correct the alterations to the axis of rotation characterized by Chao.

With regards to claim 18-20, Chao teaches the liquid is water, thus it would have been further obvious to one of ordinary skill in the art at the time of the invention to have the compensating substance being water in order to correct the alterations to the axis of rotation characterized by Chao.

Response to Arguments

3. Applicant's arguments filed 2/27/04 have been fully considered but they are not persuasive.

Regarding the rejection under 35 USC 112:

Applicant has argued that the examiner has not established a prima facie case of lack of enablement: Applicant has asserted that the examiner has failed to construe any term in the pending claims, as stated in MPEP 2164.04:

"Before any analysis of enablement can occur, it is necessary for the examiner to construe the claims. For terms that are not well-known in the art, or for terms that could have more than one meaning, it is necessary that the examiner select the definition that he/she intends to use when examining the application, based on his/her understanding of what applicant intends it to mean, and explicitly set forth the meaning of the term and the scope of the claim when writing an Office action. See Genentech v. Wellcome Foundation, 29 F.3d 1555, 1563-64, 31 USPQ2d 1161, 1167-68 (Fed. Cir. 1994)."

The claim limitation at issue, as cited in the statement of rejection above, is "calculating a moment of stability". The term "calculating" is well known in the art, and generally has one accepted meaning within the art; thus it is not necessary for the examiner to explicitly set forth the definition; however, for applicants' convenience, the following is cited from Merriam-Webster's Collegiate Dictionary entry for "calculate": "to determine by mathematical processes".

Applicant has asserted that "applicant's disclosure is presumed accurate". As stated in MPEP 2163.04:

"A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., In re Marzocchi, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971)." Examiner has provided sufficient reasoning to the contrary; thus a prima facie case has been made. The burden is now on applicant to provide evidence refuting the examiner's reasoning. For example, equations from textbooks or published papers would provide evidence that one of ordinary skill in the art would know how to perform the step of calculating.

Applicant has argued that the practice of the claimed invention would not require "undue experimentation". *"The determination that "undue experimentation" would have been needed to make and use the claimed invention is not a single, simple factual determination. Rather, it is a conclusion reached by weighing all the above noted factual considerations." In re Wands, 858 F.2d at 737, 8 USPQ2d at 1404.* It is again noted that applicant has provided no examples (working or prophetic). Furthermore the nature of the claimed invention is such that any experimentation could have potentially catastrophic worldwide consequences ("ultimate disaster": see, e.g. White or Brown, cited above). It is apparent that the nature of the invention is such that any experimentation would be "undue experimentation".

With regards to the rejections under 35 USC 103: Applicant has argued that the examiner has not met the first and third criteria for a prima facie case of obviousness.

With regard to the first criteria (suggestion or motivation to combine); this was explicitly set forth above in the statement of rejection: ", in order to correct the alterations to the axis of rotation characterized by Chao and to prevent "ultimate disaster'" The Brown and White references clearly teach the desirability of such action.

With regards to the third criteria (prior art teaches or suggests all claim limitations); it is the examiner's position that the prior art suggests the claimed steps of selecting, calculating, determining, and positioning.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is (703)308-2725. The examiner can normally be reached on M-F 5:30 am - 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703)308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-4177.

JJK
April 22, 2004

HEATHER SHACKELFORD
SUPERVISORY PATENT E
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